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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,628	02/12/2001	Ursula Murschall	00/057 MFE	9521

7590

09/09/2004

ProPat, L.L.C.  
2912 Crosby Road  
Charlotte, NC 28211

EXAMINER
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CHEN, VIVIAN

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/781,628	Applicant(s) MURSCHALL ET AL. <span style="float: right;">S.C.</span>	
	Examiner Vivian Chen	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 4/19/2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Nos. 6,627,695 and 6,635,340, and any patents resulting from Applications 09/791,447 and 10/296,037 and 10/311,732 has been reviewed and is accepted. The terminal disclaimer has been recorded.
2. The double patent rejections based on U.S. Patent Nos. 6,627,695 and 6,635,340, and Applications 09/791,447 and 10/296,037 and 10/311,732 have been withdrawn in view of the Terminal disclaimer filed 4/19/2004.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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2. Claims 1-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-20 of U.S. Patent No. 6,641,924 (formerly Application No. 09/421,068),

in view of ENCYCLOPEDIA OF POLYMER SCIENCE AND ENGINEERING (hereinafter ENCYCLOPEDIA);

and in view of UK PATENT APPLICATION GB 2344596 (hereinafter GB '596) or BALOG ET AL (US 3,950,301).

U.S. Patent No. 6,641,924 claims a white, biaxially oriented film comprising at least one layer comprising polyester and the specified cycloolefin, as well as other features such as the recited whiteness, opacity, and gloss values; and the presence of additional layers, etc. However, the reference does not explicitly disclose the recited UV stabilizer and flame retardant.

ENCYCLOPEDIA discloses that it is well known in the art incorporate additives to polyester films to improve UV stability and/or flame resistance (page 204).

GB '596 discloses that it is well known in the art to incorporate a combination of 0.1-10 wt% of known UV stabilizers such as triazines or benzotriazoles and 0.1-45 wt% of known flame retardants such as organic phosphorus compounds (pages 4-5) by means of masterbatch technology (lines 3-4, page 9) in polyester films in order to obtain durable, weather-resistant sheets and laminates. BALOG ET AL discloses that it is well known in the art to incorporate a combination of 0.25-3 wt% of a hydroxybenzotriazole UV stabilizer and 0.5-50 parts by weight of known flame retardants such as organic phosphorus compounds (pages 4-5) by means of masterbatch technology (lines 12-40, col. 7; line 53, col. 7 to line 23, col. 8; line 55, col. 9 to line 42, col. 10) in polyester films in order to obtain durable, weather-resistant sheets and laminates.

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate conventional additives such as triazine or hydroxybenzotriazole UV stabilizers and organic phosphorus flame retardants into at least one layer of the white film claimed in the above patent in order to improve durability, fire resistance, and color stability. One of ordinary skill in the art would have utilized conventional compounding methods such as masterbatches as indicated in claims 1-2 to incorporate the additives into the polyester composition. It would have been obvious to incorporate other fillers or pigments into the film in order to optimize the optical characteristics of the film as indicated in claims 1, 10, 14-16 in order to obtain the visual properties and physical properties required by a given application. It is conventional to incorporate UV stabilizers and flame retardants in the outside layers of a laminate as indicated in claim 11 in order to provide protection for the inner core layers. One of ordinary skill in the art would have used conventional functional intermediate layers such as an adhesive layer between two film layers in order to improve the interlayer adhesion as indicated in claim 12. Since the patent claims polyester compositions containing cycloolefin contents that are substantially comparable to those recited in the claims, the Examiner has reason to believe that the disclosed films would have non-yellowing properties comparable to those recited in the claims, therefore the Examiner has basis for shifting the burden of proof to applicant as in *In re Fitzgerald et al.*, 205 USPQ 594.

***Response to Arguments***

3. The rejections under 35 USC 103(a) based on JP '319 and JP '349 and JP '717 has been withdrawn in view of Applicant's arguments filed 10/9/2003 and the showing in the specification.

4. Applicant's arguments filed 4/19/2004 have been fully considered but they are not persuasive.

(A) Applicant argues that each of the references fail to teach or suggest the claimed film in its entirety. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). US '924 shows the majority of the features recited in the present application claims, while the secondary references are relied upon to illustrate other specific features which, while not explicitly claimed or disclosed in US '924, are well known in the art of polyester films. Applicant has not provided convincing arguments or probative evidence of either criticality or unexpected results from those features not explicitly disclosed or taught by US '924.

(B) Applicant argues that U.S. Patent No. 6,641,924 fails to explicitly claim the recited range of COC content. However, US '924 claims a film layer containing 4-60 wt% COC which clearly encompasses the recited 8-10 wt% recited in the present application claims. Applicant has not provided any probative evidence of unexpected results or criticality from the recited amount of COC.

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(C) Applicant argues that US '924 fails to explicitly disclose or suggest the use of precrystallized, predried masterbatches. However, the specific method of incorporating an additive into a film (i.e., precrystallized, predried masterbatches) is a product-by-process limitation and is not further limiting in as so far as the structure of the product is concerned. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. ***The patentability of a product does not depend on its method of production.*** If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." [emphasis added] *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113. Once a product appearing substantially identical is found, the burden shifts to applicant to show a ***unobvious*** difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1993). Applicant has not provided any probative evidence that the pretreatment of the masterbatch materially affects the end product film.

(D) In response to applicant's argument that there is no suggestion to combine the references, Applicant's argument is deemed moot in view of the new grounds of rejection, in which *ENCYCLOPEDIA* clearly discloses that the use of additives used to increase flame retardancy and/or UV stability are very well known, especially in the field of polyester films. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

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USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The selection and use of conventional additives with known effects to improve the performance of polymeric films is a matter of design choice and well within the scope of one of ordinary skill in the art, based on well established considerations such as safety (e.g., resistance to fire), durability (e.g., resistance to UV<sup>a</sup> radiation), optical properties, etc. Applicant has provided any probative evidence of unexpected results or criticality for the use of well known categories of additives such as flame retardants or UV absorbers.



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***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 6, 2004



Vivian Chen  
Primary Examiner  
Art Unit 1773